

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Original): A method of forming a portion of an integrated circuit comprising:

- providing a silicon carbide base;
- epitaxially growing a dielectric film on the silicon carbide base; and
- forming a CMOS device on the silicon carbide base and epitaxially grown dielectric film, wherein the CMOS device includes a channel region and a gate dielectric, the channel region is formed in the silicon carbide base and the gate dielectric is formed by the epitaxially grown dielectric film.

Claim 2 (Original): A method as defined in claim 1 wherein:

- the step of epitaxially growing the dielectric film further comprises forming a crystalline carbon-containing film on the silicon carbide base.

Claim 3 (Original): A method as defined in claim 1 wherein:

- the step of epitaxially growing the dielectric film further comprises forming a crystalline carbon film on the silicon carbide base.

Claim 4 (Original): A method as defined in claim 1 further comprising:

- providing a silicon substrate; and
- the step of providing the silicon carbide base further comprises epitaxially growing the silicon carbide base on the silicon substrate.

Claim 5 (Original): A method as defined in claim 1 wherein:

- the step of forming the CMOS device further comprises forming a silicon carbide region on the epitaxially grown dielectric film, wherein the CMOS device further includes a gate electrode formed by the silicon carbide region.

Claim 6 (Original): A method as defined in claim 5 wherein:

the step of forming the silicon carbide region on the epitaxially grown dielectric film further comprises epitaxially growing a silicon carbide layer on the epitaxially grown dielectric film.

Claim 7 (Original): A method as defined in claim 5 wherein:

the step of forming the silicon carbide region on the epitaxially grown dielectric film further comprises depositing a silicon carbide layer on the epitaxially grown dielectric film.

Claim 8 (Original): A method of forming a CMOS device having a channel region and a gate dielectric region in an integrated circuit comprising:

providing a semiconductor substrate;
epitaxially growing a strained silicon carbide film on the semiconductor substrate;
epitaxially growing a crystalline carbon-containing film on the silicon carbide film;
forming the gate dielectric region of the CMOS device in the epitaxially grown crystalline carbon-containing film; and
forming the channel region of the CMOS device in the epitaxially grown strained silicon carbide film.

Claim 9 (Original): A method as defined in claim 8 wherein the CMOS device further has a gate electrode region, further comprising:

epitaxially growing a silicon carbide film on the crystalline carbon-containing film of the gate dielectric region; and
forming the gate electrode region of the CMOS device in the silicon carbide film epitaxially grown on the crystalline carbon-containing film of the gate dielectric region.

Claim 10 (Withdrawn): An integrated circuit comprising:

a silicon carbide base;

a dielectric film epitaxially grown on the silicon carbide base; and
a CMOS device including a channel region formed in the silicon
carbide base and a gate dielectric formed by the epitaxially grown dielectric film.

Claim 11 (Withdrawn): An integrated circuit as defined in claim 10 wherein:
the epitaxially grown dielectric film includes crystalline carbon.

Claim 12 (Withdrawn): An integrated circuit as defined in claim 10 wherein:
the epitaxially grown dielectric film has a dielectric constant larger than

4.5.

Claim 13 (Withdrawn): An integrated circuit as defined in claim 10 further
comprising:

a silicon substrate;
wherein the silicon carbide base is formed on the silicon substrate.

Claim 14 (Withdrawn): An integrated circuit as defined in claim 13 wherein:
the silicon carbide base is epitaxially grown on the silicon substrate.

Claim 15 (Withdrawn): An integrated circuit as defined in claim 14 wherein:
the epitaxially grown silicon carbide base is a strained silicon carbide
film.

Claim 16 (Withdrawn): An integrated circuit as defined in claim 10 wherein:
the silicon carbide base comprises a silicon carbide substrate.

Claim 17 (Withdrawn): An integrated circuit as defined in claim 10 further
comprising:
a silicon carbide region formed on the epitaxially grown dielectric film;
wherein the CMOS device further includes a gate electrode formed by
the silicon carbide region.

Claim 18 (Withdrawn): An integrated circuit as defined in claim 17 wherein:
the silicon carbide region is epitaxially grown on the epitaxially grown
dielectric film.

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Claim 19 (Withdrawn): An integrated circuit as defined in claim 17 wherein:
the silicon carbide region is deposited on the epitaxially grown
dielectric film.